

Title (en)

Control valve for variable displacement compressor

Title (de)

Regelventil für einen Verdichter variabler Verdrängung

Title (fr)

Soupape de commande pour un compresseur à capacité variable

Publication

EP 1138946 A3 20030820 (EN)

Application

EP 01108085 A 20010329

Priority

JP 2000094006 A 20000330

Abstract (en)

[origin: EP1138946A2] A valve body (43) adjusts opening of a supply passage (28) in response to the position in a valve chamber (46). A pressure-sensitive member (54) is moved in accordance with the pressure difference (PdH-PdL) between two pressure monitoring points (P1, P2), which are located in an external refrigerant circuit. The movement of the pressure-sensitive member (54) affects the position of the valve body (43) such that the compressor displacement is changed to reduce fluctuations in the pressure difference (PdH-PdL). A solenoid (60) changes force applied to the valve body (43) so that a set pressure difference, which is a reference value for changing the position of the valve body (43) by the pressure-sensitive member (54), is changed. <IMAGE>

IPC 1-7

F04B 27/18

IPC 8 full level

F04B 49/06 (2006.01); **F04B 27/08** (2006.01); **F04B 27/14** (2006.01); **F04B 27/18** (2006.01); **F04B 49/00** (2006.01)

CPC (source: EP KR US)

F04B 27/08 (2013.01 - KR); **F04B 27/1804** (2013.01 - EP US); **F04B 2027/1813** (2013.01 - EP US); **F04B 2027/1827** (2013.01 - EP US); **F04B 2027/1877** (2013.01 - EP US); **F04B 2205/08** (2013.01 - EP US); **Y10T 137/86027** (2015.04 - EP US)

Citation (search report)

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- [A] US 6010312 A 20000104 - SUITOU KEN [JP], et al
- [A] US 4946350 A 19900807 - SUZUKI SHINICHI [JP], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 03 28 April 1995 (1995-04-28)

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EP3757433A1; EP1788246A1; US7014428B2

Designated contracting state (EPC)

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EP 1138946 A2 20011004; **EP 1138946 A3 20030820**; **EP 1138946 B1 20090902**; BR 0101221 A 20011030; CN 1138069 C 20040211; CN 1318693 A 20011024; DE 60139742 D1 20091015; JP 2001280237 A 20011010; JP 3731434 B2 20060105; KR 100383122 B1 20030509; KR 20010094933 A 20011103; US 2001055531 A1 20011227; US 6447258 B2 20020910

DOCDB simple family (application)

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